



# RA SSMC Plug to TNC Male Cable LMR-100 Coax

Fairview Microwave's SSMC cable assemblies are part of our full line of RF interconnects available for same-day shipping. These SSMC cable assemblies are designed for test applications or connection of your SSMC system components. With a high frequency range up to 12.4 GHz, this family of SSMC cables can also be used to connect your data acquisition system or SSMC connections on your A/D converters. There are hundreds of possible cable assembly configurations to choose from, all available same day.

This SSMC cable assembly datasheet PDF contains specifications, CAD drawing and dimensions that are shown below. Fairview Microwave not only has many SSMC cable assembly options, but also a wide selection of RF, microwave and millimeter wave cable assemblies which allows RF designers to customize their configurations to whatever is required. Whether the need is to provide low loss SSMC I/O for digital receivers or simply create a custom cable assembly configuration, Fairview Microwave has the right cable assemblies for the job. Fairview can also expertly build your custom RF cable assemblies for you and ship same day.

## **Electrical Specifications**

Description	Min	Т	ур	Max	ι	Inits	
Frequency Range	DC			500		MHz	
VSWR				1.5:1			_
Velocity of Propagation		6	66			%	
RF Shielding	90					dB	_
Group Delay		1.54 [5.05]		ns/ft [ns/m]			
Capacitance		30.8 [101.05]		pF/ft [pF/m]			
Inductance		0.077 [0.25]		uH/ft [uH/m]			
DC Resistance Inner Conductor		81 [265.75]		Ω/1000ft [Ω/Km]			
DC Resistance Outer Conductor		9.5 [31.17]		Ω/1000ft [Ω/Km]			
Jacket Spark				2,000	\	/rms	

#### **Performance by Frequency**

Description	F1	F2	F3	F4	F5	Units
Frequency	50	150	220	500		MHz
						dB/m
Insertion Loss (Typ.)	0.05	0.09	0.11	0.17		dB/ft
	0.16	0.3	0.36	0.56		dB/m

#### **Electrical Specification Notes:**

Insertion Loss does not include the loss of the connectors. Insertion Loss is estimated as 0.1 dB per connector.

## **Mechanical Specifications**

**Cable Assembly** 

Diameter

0.591 in [15.01 mm]



## **Configuration:**

- SSMC Plug Right Angle
- TNC Male
- LMR-100A

## Features:

- Reliable threaded SSMC cable connection
- Max. Operating Frequency of 500 MHz
- Small form factor (SSMC connection is 50% smaller than SMA)
- In stock and ready to ship

## **Applications:**

- Software Defined Radio (SDR)
- Data acquisition systems with SSMC connections
- Digital Wideband Receivers
- · SSMC patch panels
- A/D Conversion

Fairview Microwave 1130 Junction Dr. #100 Allen, TX 75013

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Cable

Cable Type LMR-100A Impedance 50 Ohms Inner Conductor Type Solid

Inner Conductor Material and Plating Copper Clad Steel Dielectric Type PE

Dielectric Type Number of Shields

Shield Layer 1 Aluminum Tape
Shield Layer 2 Tinned Copper Braid
Jacket Material PVC, Black

2

Jacket Diameter 0.11 in [2.79 mm]

One Time Minimum Bend Radius 0.25 in [6.35 mm]

Repeated Minimum Bend Radius

1 in [25.4 mm]

Bending Moment

7 lo.1 lbs-ft [0.14 N-m]

Flat Plate Crush

1 lbs/in [0.18 Kg/mm]

Tensile Strength 15 lbs [6.8 Kg]

#### **Connectors**

Description	Connector 1	Connector 2		
Туре	SSMC Plug	TNC Male		
Specification		MIL-STD-348A		
Impedance	50 Ohms	50 Ohms		
Mating Cycles	500			
Contact Material & Plating	Beryllium Copper, G	old Brass, Gold		
Contact Plating Spec.	MIL-G-45204	30 µin minimum		
Dielectric Type	Teflon	PTFE		
Body Material & Plating	Brass, Gold	Brass, Nickel		
Body Plating Spec.	MIL-G-45204	100 µin minimum		
Coupling Nut Material & Pla	ting Beryllium Copper, G	Gold Brass, Nickel		
Coupling Nut Plating Spec.	MIL-G-45204	100 µin minimum		
Torque	1.75 in-lbs [0.2 Nm]			

### Mechanical Specification Notes:

# **Environmental Specifications**

**Temperature** 

Operating Range -40 to +85 deg C

**Compliance Certifications** (see product page for current document)

**Plotted and Other Data** 

Notes:

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<sup>\*</sup>All cable assemblies have a length tolerance of 1.5% or ± 3/8", whichever is greater.



Example: FMCA1494-12 = 12 inches long cable

FMCA1494-100cm = 100 cm long cable



#### **How to Order**

Part Number Configuration:	FMCA1494 -	XX	uu	
				cm = Centimeters <blank> = Inches</blank>
		1		Length

RA SSMC Plug to TNC Male Cable LMR-100 Coax from Fairview Microwave has same day shipment for domestic and International orders. Our RF, microwave and fiber optic products maintain a 99% availability and are part of the broadest selection in the industry.

Click the following link to obtain additional part information: RA SSMC Plug to TNC Male Cable LMR-100 Coax FMCA1494

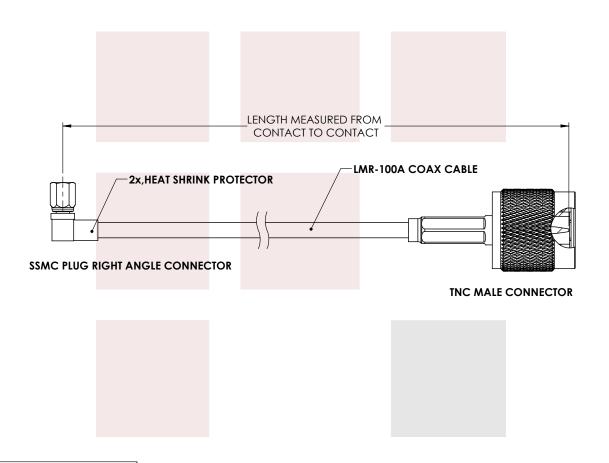
URL: https://www.fairviewmicrowave.com/ra-ssmc-plug-tnc-male-cable-lmr100-coax-fmca1494-p.aspx

The information contained in this document is accurate to the best of our knowledge and representative of the part described herein. It may be necessary to make modifications to the part and/or the documentation of the part, in order to implement improvements. Fairview Microwave reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. Fairview Microwave does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and Fairview Microwave does not assume any liability arising out of the use of any part or documentation.

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### STANDARD TOLERANCES

 $.X \pm 0.2$   $.XX \pm 0.01$  $.XXX \pm 0.005$ 

\*STANDARD TOLERANCES APPLY ONLY TO DIMENSIONS IN INCHES

FAIRVIEW MICROWAVE INC. ALLEN, TX 75013 WWW.FAIRVIEWMICROWAVE.COM	NOTES:  1. UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE NOMINAL.  2. ALL SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE AT ANY TIME.  3. DIMENSIONS ARE IN INCHES [mm].						
RA SSMC Plug to TNC Male Cable LMR-100 Coax	DWG NO FMCA1494			CAGE CODE 3FKR5			
	CAD FILE 11/08/2017	SHEET	SCAL	E N/A	SIZE A	CN2245	